BERKMAN, A.S.; MEL'NIKOVA, I.G.; LEVIN, D.I., kand. fiz.-mat.nauk,
nauchnyy red.; PETRENKO, N.P., red. izd-va; CHERKASSKAYA, P.T.,
tekhn. red.

[Structure and frost resistance of wall materials] Struktura i
morozostoikost' stenovykh materialov. Leningrad, Gosstroiizdat,
1962. 164 p.   (MIRA 15:6)
          (Walls)   (Building materials)

PROTAS, Lev Yevseyevich, kand. tekhn. nauk; BERKMAN, A.S., red.

[Production of we process keramzit] Proizvodstvo keram-
zita s mokroi podgotovkoi syr'ia. Leningrad, 1964. 23 p.
(MIRA 17:7)

BERKMAN, A.S., kand.tekhn.nauk; MEL'NIKOVA, I.G., kand.khim.nauk

Filter ceramics for the purification of nickel solutions. Stek. i ker. 22 no.3:22-26 Mr '65.   (MIRA 18:10)

1. Lengiprostrom.

ACC NR: AP7000352   (A)   SOURCE CODE: UR/0413/66/000/022/0117/0117

INVENTOR: Berkman, A. S.; Mel'nikova, I. G.

ORG: none

TITLE: Device for determining pore volume in a porous substance. Class 42, No. 188742

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 117

TOPIC TAGS: measuring apparatus, mercury measurement, POROSITY, MERCURY

ABSTRACT: An Author Certificate has been issued for a device for determining pore volume in a porous substance by forcing in mercury according to Author Certificate No. 125403. To increase the accuracy of measuring all of the pores in the material, the mercury dosing apparatus is equipped with a tube in its lower part, which is connected with a vertical capillary by which the amount of mercury in the dosing apparatus is determined.

SUB CODE: 14/ SUBM DATE: 19Aug65/

Card 1/1   UDC: 666.97.017;531.75

Name: BERKMAN, A.S.
Title: engineer

Author of book, "Instructions for Studying the PTsKU
Receiver", published by the Moscow Institute of Communication
Engineers, Division of Radio Receivers. This book treats
this receiver as follows: schematic diagrams, components,
operation, understanding the amplifiying stages of
intermediate frequencies, etc.

REF: R. F. #23-24, p.64, 1938

BERKMAN, A. S.

"The Study of Data on Centimeter Waves by Means of a Standing Wave," Iz. AK Nauk SSSR, Otdel, Tekh, Nauk, No. 8, 1943.

BERKMAN, A.S.

PROCESSES AND PROPERTIES INDEX

The influence of slotted screens on the structure of a field in a wave guide. BERKMAN, A. AND MANN, D.I. Bull. Acad. Sci. URSS (Nos. 10 11) 1139 44 (45) In Russian. —Slotted screens may be used for reducing deflection effects arising from irregularities in wave guides. The authors have investigated the reflecting properties of screens with various widths of slot, set up in a wave guide of rectangular cross-section parallel to the direction of the electrical vector, at the same time examining their influence on the structure of the field in proximity to the screen. Results are presented graphically.   E. R. A.

Physics Inst. im. P.N. Lebedev, AS USSR.

METALLURGICAL LITERATURE CLASSIFICATION

BERKMAN, B.A., inzh.

Calculation of nonlinearity in the feedback of the control system for hydraulic turbines. Energomashinostroenie 4 no.2:8-11 F '58.
(MIRA 11:4)

(Automatic control) (Hydraulic turbines)

BERKMAN, B.A.; inzh. •

Precise method for determining equally distributed hydrodynamic loads on the blades of Kaplan-type hydraulic turbines. Energomashinostroenie 10 no.6:25-27 Je '64.
(MIRA 17:9)

BERKMAN, B.A., inzh.; SMELKOV, L.L., inzh.

Determination of the frequencies of self-oscillations of a
horizontal hydraulic turbine-generator unit taking into
account the resilience of the fixing of the stator columns.
Energomashinostroenie 10 no.7:5-8 Jl '64.   (MIRA 17:9)

BERKMAN, B.A.

Technical theory of bent rods of complex configuration.
Trudy LTIKHP 15:173-185 '58.
(MIRA 13:4)

1. Predstavlena Kafedroy soprotivleniya materialov Leningrad-
skogo tekhnologicheskogo instituta kholodil'noy promyshlennosti.
(Elastic rods and wires) (Strains and stresses)

BERKMAN, B.A., insh.

Taking into account the blade curving of adjustable blade type
turbines in its design for strength. Energomashinostroenie 8
no.4:20-22 Ap '62.
(MIRA 15:4)
(Hydraulic turbines--Design and construction)

BERKMAN, B.A., inzh.

Designing annular flexure springs. Vest.mashinostr. 43 no.4:27-28 Ap '63.
(Springs (Mechanism))   (MIRA 16:4)

BERKMAN, B.A. (Leningrad); KITOVER, K.A. (Leningrad)

Deformations of a circular ring under the action of equal
concentrated twisting pairs. Inzh. zhur. 3 no.1:179-182 '63.
(MIRA 16:10)

(Deformations (Mechanics))

BERKMAN, R.Ya.

Detection of higher even harmonics. Geofiz. prib. no. 12:52-60
'62.   (MIRA 17:5)

1. Institut mashinovedeniya i avtomatiki AN SSSR.

ACCESSION NR: AP4029219

S/0114/64/000/004/0044/0046

AUTHOR: Berkman, B. A. (Engineer)

TITLE: Designing an adjustable-blade mechanism with rolling-contact bearings

SOURCE: Energomashinostroyeniye, no. 4, 1964, 44-46

TOPIC TAGS: blade, adjustable blade, adjustable blade mechanism, adjustable blade turbine, hydraulic turbine

ABSTRACT: A more accurate method for designing an adjustable-blade mechanism is set forth. Formulas for moments, forces, and reactions are developed from static equilibrium equations for the blade, its journal, and its operating lever with bearings. The journal is externally supported by conical radial thrust bearings and internally by radial roller bearings or by sleeve bearings (see Enclosure 1). The adjustable-blade mechanism of an experimental, no. 22 turbine at the Volga Hydroelectric Station was calculated by the new method

Card 1/3

ACCESSION NR: AP4029219

as well as by the old for comparison. It was found that the old method seriously underrated the friction moment and reactions, while both methods yielded the same result for the required servomotor effort. Orig. art. has: 3 figures and 11 formulas.

ASSOCIATION: Leningradskiy metallicheskiy zavod (Leningrad Metal Plant); Khar'kovskiy turbinny*y zavod im. S. M. Kirova (Khar'kov Turbine Plant)

SUBMITTED: 00   DATE ACQ: 01May64   ENCL: 01
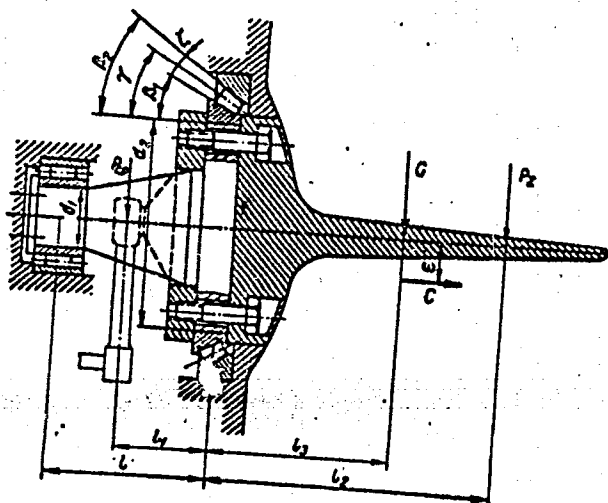
SUB CODE: PR   NO REF SOV: 003   OTHER: 000

Card 2/3

ACCESSION NR: AP4029219

ENCLOSURE: 01

Adjustable-blade mechanism with rolling-contact bearings

Card 3/3

BERKMAN, B.A., inzh.

Stress analysis of the plate for the automatic valve of a piston compressor. Vest. mashinostr. 44 no.10:21-23 O '64.   (MIRA 17:11)

BERKMAN, B.A., inzh.

Deformation of a closed frame with variable cross section subject to the action of a random periodic load. Energomashinostroenie 11 no.1:15-21 Ja '65.

(MIRA 18:4)

KOVALEV, N.N., doktor tekhn.nauk, prof.; BERKMAN, B.A., inzh.

Study of the vane rotation mechanism of an axial-flow hydraulic
turbine. Energomashinostroenie. 11 no.2:1-7 F '65.

1. Chlen-korrespondent AN SSSR (for Kovalev).   (MIRA 18:4)

...contained in its production by the contact method and rapidly cooled, thus causing them...vapors...

L 41038-65   EEO-2/EWT(d)/EEC-4/EED-2   Pp-4/Pac-4
ACCESSION NR: AP5036291

R. Ya. (L vov)

Cord 1/2

L 41038-65

ACCESSION NR: AP5006291

EN

REF SOV. 005

OTHER:

Card 2/2

Colloidal solutions of alkali or alkaline earth metals. B. K. HERKMAN, L. G. BORISOVA, M. YA. GEN, P. D. DANKOV, G. S. DUDNIKOV, I. L. ZIL'MANOV, M. S. ZISKIND, P. N. KRASNOBAEVA, A. A. LAURIA, M. V. LEBEDINSKII, R. LUKINA, B. M. SAMBURSKAYA, D. A. FAINBERG, A. I. SHAL'NIKOV and K. R. MAKSIMOV. Russ. 28,890,

Dec. 2, 1931. The method is characterized by introducing into the solvent a soln. of the metal in NH_3 followed by evapn. of the NH_3.

BERKMAN, B.Ya.

"General chemical technology of organic compounds." B.M.Bogoslov-skii and others. Reviewed by B.F.Berkman. Khim.prom. no.5:319 Jl-Ag '56.

(Chemistry, Organic) (Bogoslovskii, B.M.)   (MLRA 9:11)

BERKMAN, Boris Yefimovich; KOST, A.N., red.; SHPAK, Ye.G., tekhn.red.

[Industrial synthesis of chlorobenzene] Promyshlennyi sintez khlorbenzola. Moskva, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1957. 143 p.

(Benzene)   (MIRA 10:12)

MAKSYUTA, V. I.

S(1)

PHASE I BOOK EXPLOITATION   SOV/1520

USSR. Gosudarstvennyy mashino-tekhnicheskiy komitet

Avtomatizatsiya khimicheskikh i koksokhimicheskogo proizvodstv; sbornik statey
(Automation of the Chemical and By-product Coking Industries) Moscow,
Metallurgizdat, 1958, 377 p. 4,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Institut nauchnoy i tekhni-
cheskoy informatsii.

Eds.: N.Ya.Fast, B.N. Yelshin, and Yu.N. Geralyaytis; M.R. Lamovskaya; Tech. Ed.: M.P. Shvetsov.

PURPOSE: This book is intended for industrial engineers and technologists interes-
ted in the state of industrial automation and may be especially useful to organi-
zations concerned with the multifarious automation problems of the chemical in-
dustry.

COVERAGE: This collection was compiled to fulfill to some degree the need for a
readily accessible information source on the latest developments in the automa-
tion of industrial processes, both foreign and domestic, and to give supplementary
information on the automation state of several chemical, metallurgical, petroleum
and textile-cellulose production processes.

Card 1/4

Kravlevskiy, P.P. Automation of the Hydrolysis and Sulfite-Alcohol
Industries

Yelshin, B.N., and D.A. Filimonov. Automation of the Synthetic Rubber
and Synthetic Alcohol Industries   131

Shashkov, A.F. Automation of the Tire Industry   147

Berkman, B.Ye., and Yu. N. Geralyaytis. Automation of the Industrial
Production of Aniline Dye   174

Sherman, M.Ya. Automation of the By-product Coking Industry   203

Bankov, N.N. Special Instruments and Automation Methods Employed in
Chemical Production in the Soviet Union   222

Belozerskiy, S.S., and Sh. L. Kobalin. Instruments and Automation
Methods Employed in the Petroleum Industry of the Soviet Union   249

Card 3/4   256

8(0), 5(0)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 174 (USSR)

SOV/112-59-4-7665

AUTHOR: Berkman, B. Ye., and Gerulaytis, Yu. N.

TITLE: Automating the Aniline Dyestuff Industry

PERIODICAL: V sb.: Avtomatiz. khim. i koksokhim. proiz-v. M., Metallurgizdat, 1958, pp 203-221

ABSTRACT: The state of automation of the aniline dyestuff industry is considered. Principal data on automating the production of chlorobenzene, aniline, phthalic anhydride, and benzidine is cited as an example. The technical and economic effectiveness of automation is reported. Nine illustrations. Bibliography: 8 items.

A.A.S.

Card 1/1

BERKMAN, Boris Yefimovich; KHAZANOV, I.M., red.; KOGAN, V.V., tekhn.red.;
SPERANSKAYA, A.A., tekhn.red.

[Sulfonation and alkaline fusion in the industrial organic
synthesis] Sul'firovanie i shchelochnoe plavlenie v promyshlen-
nosti organicheskogo sinteza. Moskva, Gos.nauchno-tekhn.izd-vo
khim.lit-ry, 1960.

(Sulfonation)   (Chemistry, Technical)   (MIRA 14:1)

PHASE I BOOK EXPLOITATION   SOV/5015

Berkman, Boris Yefimovich

Sul'firovaniye i shchelochnoye plavleniye v promyshlennosti organicheskogo sinteza (Sulfonation and Caustic Fusion in the Organic Synthesis Industry) Moscow, Goskhimizdat, 1960. 267 p. Errata slip inserted. 5,000 copies printed.

Ed.: I.M. Khazanov; Tech. Eds.: V.V. Kogan and A.A. Speranskaya.

PURPOSE: This book is intended for engineers, technicians, and chemists working in scientific research institutes, and design and planning organizations of the chemical industry. It may also be of interest to teachers and students of chemistry and chemical technology in schools of higher education.

COVERAGE: The book describes modern methods for the industrial synthesis of phenol, resorcinol, alkylbenzenesulfonates, naphthols, and other intermediate aromatic products which are produced by processes utilizing sulfonation and caustic fusion. Problems dealing with introduction of continuous industrial processes, mechanization and automation of production, purification of waste waters, and the

Card 1/7

Sulfonation and Caustic Fusion (Cont.)

SOV/5015

protection of equipment from corrosion are reviewed. In addition to literature sources and the experimental findings of the author, information gained through plant experience and materials from research and design and planning institutes are included. A supplementary bibliography of Soviet sources on the purification of benzene, the dephenolization of waste waters, and the mechanization of labor in the aniline dye industry follows the main reference list. No personalities are mentioned. There are 183 references: 134 Soviet, 39 English, 2 French, and 8 German.

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Foreword

Card 2/7 .

BERKMAN, B.Ye.

Selection of a method for the production of phenol. Khim. prom.
no. 7:554-556 O-N '60.
(Phenol)   (MIRA 13:12)

BERKMAN, B. Ye.

Principal means for reducing the cost of the construction of aniline dye factories. Khim.prom. no.3:154-163 Mr '61. (MIRA 14:3)
(Aniline) (Chemical plants—Cost of construction)

BERKMAN, B.Ye.

Standard laboratories for chemical enterprises. Khim. prom.
no.9:18-23 S '61.

(Chemical laboratories)   (MIRA 15:1)

BERKMAN, B.Ye.

Speeding up of the planning and construction of small-tonnage aniline dye industries. Khim. prom. no.6:407-414 Je '63.

(MIRA 16:8)

(Aniline)   (Dyes and dyeing)

BERKMAN, Boris Yefimovich; RATMANSKIY, M.N., red.

[Industrial synthesis of aromatic nitro compounds and amines]
Promyshlennyi sintez aromaticheskikh nitrosoedinenii i aminov.
Moskva, Izd-vo "Khimiia," 1964. 343 p.   (MIRA 17:5)

BERKMAN, B.Ye.

Continuous action reactors in the aniline colors industry.
Khim. prom. 40 no.8:561-569 Ag '64.   (MIRA 18:4)

DAMSKAYA, G.I.; BERKMAN, N. Sh.

Viscosity of slags containing barium oxide. Sbor. nauch. trud.
GINTSVETMET no.15:81-90 '59.   (MIRA 14:4)
    (Viscosity)   (Slag)   (Barium oxide)

AL'TGAUZEN, A.Ya.; BERKMAN, G.I.

Comparative rating of various testing methods for detecting the
presence of cancerous elements in phlegm. Lab.delo 2 no.1:7-9
Ja-F '56.   (MLRA 9:10)

1. Iz Ukrainskogo rentgeno-radiologicheskogo i onkologicheskogo
instituta (dir. - dotsent Ye.A.Bazlov), Khar'kov.
        (CANCER) (MUCUS)

KRASTINA, E.M. (Khar'kov, Pushkinskaya ul. 83); BERKMAN, G.I. (Khar'kov, Pushkinskaya ul. 83)

Clinical and laboratory (cytological) diagnosis of cancer of the uterine body [with summary in English] Vop.onk. 2 no.3:349-351 '56.
(MIRA 9:10)

1. Iz Ukrainskogo rentgeno-radiologicheskogo i onkologicheskogo instituta (dir. - dotsent Ye.A.Bazlov)
(UTERUS NEOPLASMS, diag.
cytol. & histol.)

GAMPER, V.V., BERKMAN, G.I.

Clinical laboratory diagnosis of malignant tumors of the ovaries.
Lab.delo 4 no.6:10-13 N-D '58   (MIRA 11:12)

1. Iz ginekologicheskogo otdeleniya (zav. - dots. S.I. Pavlenko)
i klinicheskoy laboratorii (nauchnyy urkovoditel' prof. A.Ya.
Al'tgauzen) Khar'kovskogo instituta meditsinskoy radiologii.
            (OVARIES—CANCER)

BEREMAN, G.I. (Khar'kov, Sumskaya ul., d. 69, kv. 2); TARKHANOVA, M.V.

Primary actinomycosis of the breast. Vest.khir. 81 no.12:77
D '58.   (MIRA 12:2)

1. Iz Ukrainskogo rentgeno-radiologicheskogo i onkologicheskogo
instituta (dir. - dots. Ya.A. Bazlov).
            (BREAST, dis.
                actinomycosis, primary (Rus))
            (ACTINOMYCOSIS, case reports
                primary of breast (Rus))

BERKMAN, I.I.

Laboratory diagnosis of actinomycosis
Klin. med., 30, no. 5, 1952

BERKMAN, I. L.

2C661 Ivanov, V.S., Berkman, I.L. i Merenkov, A.S. Rezul'taty Kontrol'nykh ispytaniy ekskavatora E - 1CO3. Mekhanizatsiya stroit-va, 1949, No. 6, s. 7-10

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

BERKMAN, I. L.

26311 I rannev, A. B. o raskhode znergii i moshchnosti potreblyayemoy
zkskavatorom.—v ogl 2-y avt: raniyev (!) A. B. Mekhanizatsiya stroit-ya, 1949,
No. 8, s. 4-7.

SO: LETOPIS' NO. 35, 1949

BERKMAN, I.L. (Eng)

Investigation of the transmission of power on a single-bucket excavator
driven by a single motor
Mekh. stroi. 9 no. 5, 1952

BERKMAN, I.L., inzhener; REYSH, A.K., inzhener.

From the work experience of excavator operators. Mekh.stroi. 11
no.8:8-12 Ag '54.   (MIRA 7:8)
        (Excavation)

BERKMAN, I.L., inzhener.

On problems of working frozen ground. Stroi.i dor.mashinostr. 1
no.10:5-10 O '56.   (MLRA 9:11)
                    (Frozen ground)

BERKMAN, I. L.

BERKMAN, I.L., inzhener; LOBANOVSKIY, M.G., inzhener; SVIDNITSKIY, T.V., inzhe-
ner.

Universal devices used for controlling the load-lifting capacity of
jib cranes. Bezop. truda v prom. 1 no.2:18-21 F '57. (MIRA 10:4)
(Cranes, Derricks, etc.)   (Servomechanisms)

BERKMAN, I.L., insh.

Experimental investigation of buckets fastened to straight
excavator shovels. Stroi. i dor. mashinostr. 2 no.12:6-10
D '57.   (MIRA 11:2)
              (Excavating machinery)

BERKMAN, Iosif L'vovich; RANNEV, Aleksandr Vladimirovich; REYSH, Arvid
Karlovich; NEMIROVSKIY, E.I., nauchnyy red.; SOKOLOVA, M.A., red.;
RAKOV, S.I., tekhn. red.

[Single-scoop construction excavators] Odnokovshovye stroitel'nye
ekskavatory. Moskva, Vses. uchebno-pedagogo. izd-vo Trudrezervizdat,
1958. 441 p.   (MIRA 11:7)
                        (Excavating machinery)

SOKOLOV, K.M.; YEVSTAFEYEV, S.V.; ROSTOTSKIY, V.K.; GRECHIN, N.K.; STANKOVSKIY,
    A.P.; BAUMAN, V.A.; BERKMAN, I.L.; BORODACHEV, I.P.; BOYKO, A.G.;
    VALUTSKIY, I.I.; VATSSLAVSKAYA, L.Ya.; VOL'FSON, A.V.; DOMBROVSKIY,
    N.G.; YEGNUS, M.Ya.; YEFREMENKO, V.P.; ZIMIN, P.A.; IVANOV, V.A.;
    KOZLOVSKIY, A.A.; KOSTIN, M.I.; KRIMERMAN, M.N.; LINEVA, M.S.;
    MERENKOV, A.S.; MIROPOL'SKAYA, N.K.; PETROV, G.D.; REBROV, A.S.;
    ROGOVSKIY, L.V.; SMIRNOV, G.Ya.; SHAFRANSKIY, V.N.; SHIMANOVICH, S.V.;
    SHNEYDER, V.A.

Evgenii Richardovich Peters; obituary; Mekh. stroi. 15 no.1:3 of cover
Ja '58.   (MIRA 11:1)
           (Peters, Evgenii Richardovich, 1892-1957)

BERKMAN, I.L., inzh.; KOPEYKINA, N.N., inzh.; SHCHEDROVITSKIY, S.S.,
kand.tekhn.nauk

Universal load limiter for construction cranes. Stroi. i dor.
mash. 6 no.6:7-9 Je '61.   (MIRA 14:7)
(Cranes, derricks, etc.—Equipment and supplies)

RYAKHIN, V.A., kand.tekhn.nauk; BERKMAN, I.L., inzh.; REBROV, A.S., inzh.

Standardized series of shovel excavators and self-propelled boom cranes. Stroi. i dor. mash. 7 no.5:9-12 My '62.   (MIRA 15:5)
(Excavating machinery)
(Cranes, derricks, etc.)

BERKMAN, Iosif L'vovich, inzh.; RANNEV, A.V., kand. tekhn. nauk;
REYSH , A.K., kand.tekhn.nauk; KOSTIN, M.N., nauchn.red.;
BEREZOVSKAYA,A.L., ved. red.; PERSON, M.N., tekhn.red.

[Single-bucket construction excavators] Odnokovshovye
stroitel'nye ekskavatory. Izd.3., perer. i dop. Moskva,
Proftekhizdat, 1964. 642 p.   (MIRA 17:2)

BERKMAN, I.L.; BULANOV, A.A.; YEREMENKO, K.P.; SKVORTSOV, G.S.

Single bucket excavator with hydraulic drive. Gor. zhur.
no.11:73 N '63.   (MIRA 17:6)

[illegible faded text]

BERKMAN, I.L., inzh.

    A united system of indexing one-bucket excavators and self-
propelled cranes. Stroi. i dor. mash. 10 no.8:7-9 Ag '65.
                                      (MIRA 18:9)

BERKMAN, I.V., inzh.

Mechanical properties and structure of blades manufactured by precision casting of 2Kh13 steel. Trudy LMZ no.9:60-69 '62.
(MIRA 16:6)

(Turbines--Blades)   (Steel castings--Testing)

BERKMAN, I.V., insh.

High strength copper-nickel erosion-resistant alloy. Trudy
LMZ no.9:89-99 '62.   (MIRA 16:6)
    (Copper-nickel-zinc alloys--Testing)   (Erosion of metals)

BERKMAN, L.

Opyt ratsionalizatsii perevozok v Severo-Zapadnom okruge. /Experience in raising
the efficiency of freight transport in the North-Western District/. (Zhel-dor,
transport, 1948, no. 3., p. 34-37).

DLC: HE7.Z5

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
     Reference Department, Washington, 1952, Unclassfied.

BERKMAN, Iosif L'vovich, inzh.; RANNEV, Aleksandr Vladimirovich,
kand.tekhn.nauk; REYSH, Arvid Karlovich, inzh.; NEMIROVSKIY,
B.I., nauchnyy red.; BEREZOVSKAYA, A.L., vedushchiy red.

[Construction power shovels] Odnokovshovye stroitel'nye
ekskavatory. Izd.2., perer. i dop. Moskva, Vses.uchebno-
pedagog.izd-vo Proftekhizdat, 1960. 599 p.

(MIRA 14:4)

(Power shovels)

BERMAN, L. S.

The decoration of porcelain and faience. Moskva, Rosgizmestprom, 1949. 189, (3) p.
 (55-56091)

TP823.B4

1. Pottery.   2. Porcelain.

L 9830-63   EWP(;l)/EWT(m)/BDS/ES(w)-2—AFFTC/ASD/SSD--Pc-4/Pab-4--RM/MAY

ACCESSION NR: AP3000534   S/0106/63/000/005/0049/0057   67

AUTHOR: Parikozhka, I. A.; Pugach, A. B.; Berkman, N. A.; Frolov, P. A.

TITLE: Insulation-monitoring system for plastic-coated communication cables

SOURCE: Elektrosvyaz', no. 5, 1963, 49-57

TOPIC TAGS: communication cables, insulation-fault location in cables;
insulation-fault signaling

ABSTRACT: Bridge-type fault-location methods are unreliable when applied to
200-250-km-long sections of a small-size cable between two attended repeater
stations (ARS). A new method is offered in which an insulation-fault signaling
device is installed at every unattended repeater station (URS), the distance
between adjacent stations being a few miles. The device includes a TKh-3B cold-
cathode tube and monitors continuously the insulation between two pilot wires
in the cable. A transistorized locator is installed at every ARS and serves to
indicate the particular URS section where the insulation fault has occurred.
The system has been in trial operation for over one year. It is applicable

Card 1/2

L 9830-63
ACCESSION NR: AP3000534

also to lead- and aluminum-sheathed cables if special pilot wires are provided.
The advantages claimed are: quick location of the faulty section while the
insulation resistance of the working wires is still high; the monitoring system
is well protected against power-frequency and pulse interference and against
earth currents; the indicated number of the faulty section can be checked and
rechecked; the system reliability is guaranteed by light working conditions and
by remote-controlled checking of its components. Orig. art. has: 7 equations
and 6 figs.

ASSOCIATION: none

SUBMITTED: 12May62   DATE ACQ: 03Jun63   ENCL: 00

SUB CODE: CO   NR REF SOV: 005   OTHER: 000

FR AID: 29Aug63

Ja/nh
Card 2/2

ACCESSION NR: AP4045821   S/0106/64/000

AUTHOR: Bonilpad, M. A.; Bleykhman, V. G.; Pax

for counting errors in the

May 1964, 40

counting error stat
Asian data transmission

element which

at a speed of

transmitter and

signal generate

signals and sending

the signals at

Card 1/2

L 10651-65

ACCESSION NR: AP4045821

a signal regenerator, a synchronizer, a test-signal gate

stabilized by quartz. The test-signal generator produces combinations 1:1, 1:6, 6:1 ... by decreasing the ... a 16-element pseudo-random pulse train. Some data ... its base circuits are given. Orig.

ASSOCIATION: none

SUBMITTED: 07May64   ENCL: 00

SUB CODE: EC   NO REF SOV: 004   OTHER

621.315.052.7

AUTHOR: Berkman, N. A.; Gontar', V. M.; Gurov, V. S.; Darova, P. I.; Yetrukhin,
N. N.; Zolotarev, Ya. M.; Zrazhevskiy, S. P.; Kopp, V. M.; Pasechnik, N. D.;
Ponomarenko, V. A.; Pugach, A. B.; Raykin, P. S.; Sergeyev, I. V.

sisting of flip-flops, AND gates, and registers. Orig

Nauchno-issledovatel'skiy institut Ministerstva svyazi SSSR (Nauchno...)
Research Institute of Communications of the Ministry of Communications (?)

L 4902-66   EWT(d)/FSS-2/FCS(f)

ACC NR: AP5023279   UR/0302/65/000/003/0054/0055
                                     620.1.087.4

AUTHOR: Berkman, N. A.; Bobreshov, Ye. N.; Ponomarenko, V. A.; Raykin, P. S.

TITLE: Multichannel recorder

SOURCE: Avtomatika i priborostroyeniye, no. 3, 1965, 54-55

TOPIC TAGS: data recording, data processing, multichannel analyzer, multitrack recording, statistic analysis, data transmission, electronic device, communication equipment

ABSTRACT: Numerous processes are investigated by statistical analyzers which incorporate devices for the registration of results. The majority of such devices are either extremely cumbersome and expensive or utilize single channels preventing the simultaneous registration of data. The present article describes a comparatively simple recorder which simultaneously registers, with a reasonable degree of accuracy, the results of the analysis of random quantities in twenty channels. This device, developed at the Kiyevskoye otdeleniye Tsentral'nogo nauchno-issledovatel'skogo instituta svyazi (Kiev Department, Central Scientific-Research Institute of Communications) is based on the scaling of electrical impulses arriving from statistical analyzers. The block diagram of the recorder and the basic triggering scaler circuit are presented and their operation is described. The device is presently in use at the Kiev and Moscow communication centers in conjunction with the study of statistical characteristics of interferences and interruptions during transmission of data. Orig. art. has: 2 figures.

Card 1/2

L 4902-66

ACC NR: AP5023279

ASSOCIATION: None

SUBMITTED: 00   ENCL: 00   SUB CODE: DP, IE, EC

NO REF SOV: 002   OTHER: 000

Card 2/2

BERKMAN, N.S.; ORIONOV, A.A.; SEREBRENNIKOVA, Ye.Ya.; Prinimali uchastiye:
SYRTSOVA, V.N.; KUZNETSOVA, Ye.S.

Granulation and fluidized bed roasting of copper charge mixtures
at the Alaverdi Combine. Sbor. nauch. trud. Gintsvetmeta no.18:
321-327 '61.   (MIRA 16:7)

(Alaverdi—Copper industry)
(Ore dressing)

137-58-4-6432

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 13 (USSR)

AUTHORS: Damskaya, G. I. , Berkman, N. Sh.

TITLE: Briquetting of Copper-Nickel Concentrates (Briketirovaniye medno-nikelevykh kontsentratov)

ABSTRACT: When presses capable of pressures of 400 kg/cm^2 or more are available, the amount of sulfitecellulose caustic (SC) having to be added need be no more than 1.5-4 percent, while with 300 kg/cm^2 presses the requirement is 2 percent and with 200 kg/cm^2 presses it is 2.5-3 percent. Introduction of >2 percent SC to the charge at unit pressures of 400 kg/cm^2 and an optimal charge moisture content of 6 percent causes the briquets to adhere to the mold. When the briquetting pressure is reduced to 200 kg/cm^2 and the SC consumption to 2-3 percent, adhesion is eliminated. Hence, the most desirable method is employment of reduced pressure (2(~ 250 kg/cm^2) and addition of 2.5-3 percent SC. A drier charge is needed for high-pressure than for low-pressure presses.   A. Sh.

Card 1/1

1. Copper alloys--Briquetting processes

Alimentary azotemia in Bright's disease. R. S. Berk-
mann. Klin. Med. (U. S. S. R.) 17, No. 1, 88-95 (1939).—
An increase in residual N (I) with no change in urea (II)
was observed after enteral injection of glycine (III) into
patients with Bright's disease. No direct relationship
between I, II and excreted N and the injected III was
observed.
S. A. Karjala
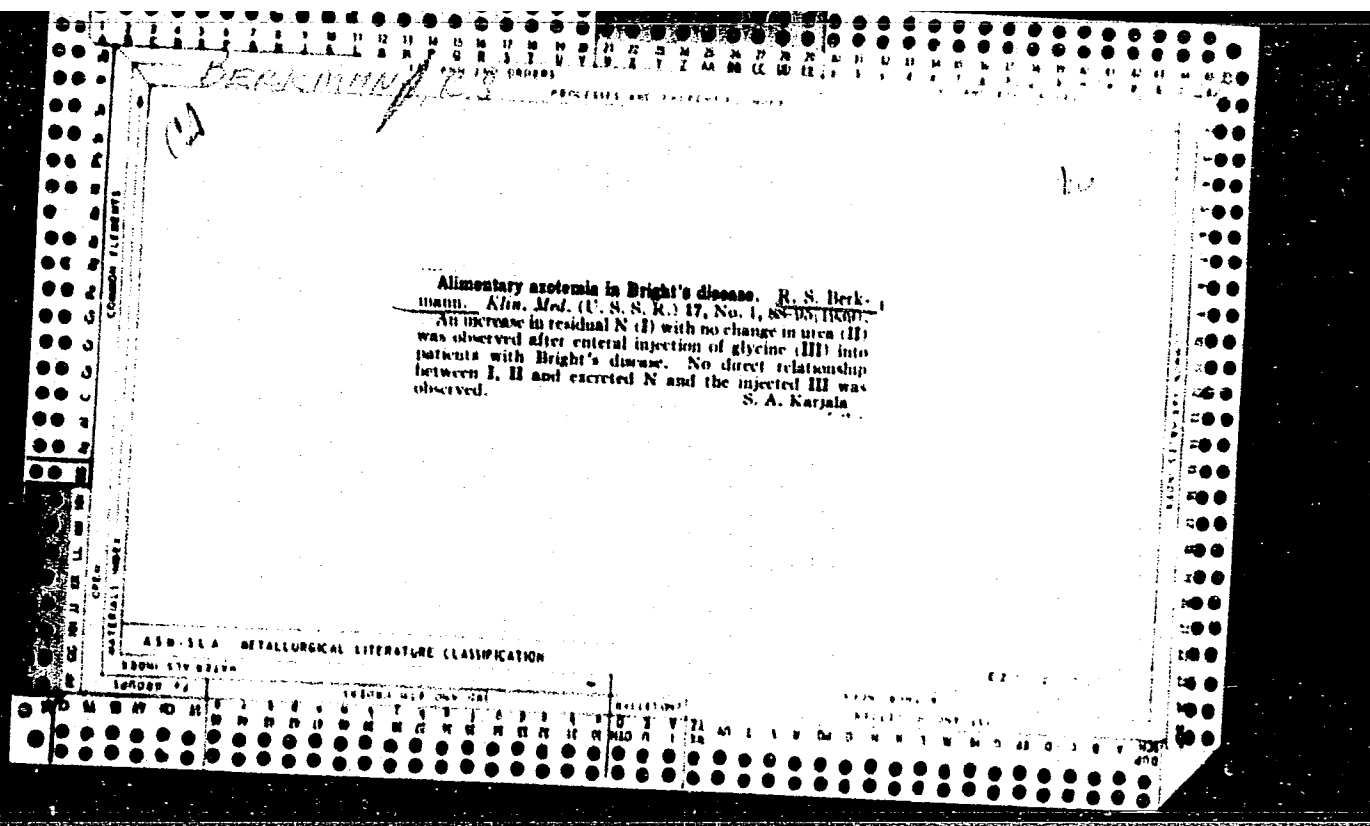
BERKMAN, R.Ya.; SPEKTOR, Yu.I.

Selective amplifiers with parallel-T circuits. Nauch.zap. IMA
AN URSR. Ser.avtom. i izm. tekh. 5:274-282 '55.   (MLRA 9:10)

(Amplifiers, Electron-tube)

SOV/112-57-5-9889

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 5, p 37 (USSR)

AUTHOR: Papernyy, Ye. A., Berkman, R. Ya.

TITLE: Computer for Continuous Measurements of Steam-Boiler Efficiency
(Schetno-reshayushcheye ustroystvo dlya nepreryvnogo izmereniya k. p. d.
parovogo kotla)

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-ta, 1955, Nr 32, pp 163-176

ABSTRACT: A circuit diagram is suggested, and principal calculation and design
are developed for a new instrument intended for continuous monitoring of the
efficiency of a steam boiler operating on gas or liquid fuel; the instrument is
also intended for computing the average value of efficiency over a given
stretch of time. The instrument can also serve as a reference input element
in an automatic combustion control system. An automatic 4-arm bridge circuit
is used for efficiency computation. It is pointed out that a conventional
planimetry used to obtain average values is inapplicable in this case; for that

Card 1/2

SOV/112-57-5-9889

Computer for Continuous Measurements of Steam-Boiler Efficiency

reason, two integrating meters (electric-energy meters) are used to compute the average value of efficiency; readings of the two meters are divided by a ratiometer circuit. The instrument is of a recording type; it marks efficiency-value dots intermittently with preset time spacings. An analysis of possible errors in determining both values of efficiency is given, and the instrument class (2.5) is evaluated. It is shown that the accuracy of the measuring circuit considerably exceeds the overall instrument class because the latter is limited by the accuracy of flowmeters used in the boiler room. The above instrument can be built on the basis of Soviet-make industrial devices. Conventional instruments used in boiler rooms can produce the pulses needed. (Translater's note: Only a blueprint of the instrument, not the actual instrument, is discussed in the article.)

A.G.Z.

Card 2/2

BEKKMAN, R.Ya.

Increasing the stability of phase-sensitive detectors with semi-
conductor rectifiers. Izm. tekh. no.2:43-45 Mr-Ap '57.
            (Electronic measurements)   (MIRA 10:6)

Berkman, R. Ya.

AUTHOR: Berkman, R.Ya.

21-4-8/24

TITLE: On Increasing the Accuracy of Geomagnetic Measurements Conducted
            by means of Saturated Core Probes (Pro pidvyshchennya tochnosti
            heomahnitnykh vymiryuvan', yaki vykonuyut'sya z dopomohoyu
            zalizonasychenykh zondiv)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1957, #4, pp 350-353
            (USSR)

ABSTRACT: The variations of the earth's magnetic field are measured by
            the differential method, the original field being compensated
            by means of a permanent magnet.

            The problem of the effect of magnet compensation on the zero-
            point stability of saturated ferromagnetic sensitive elements
            under varying excitation conditions has been investigated.

            A formula has been derived which expresses the condition of mi-
            nimum error introduced by changes in the excitation conditionns.
            Using this formula and approximate calculation methods, it is
            possible to determine the coordinates of the center of the
            compensation magnet which correspond to the minimum error. The

Card 1/2

TITLE: On Increasing the Accuracy of Geomagnetic Measurements Conducted 21-4-8/24
by means of Saturated Core Probes (Pro pidvyshchennya tochnosti
heomahnitnykh vymiryuvan', yaki vykonuyut'sya z dopomohoyu
zalizonasychenykh zondiv)

geometrical interpretation of this formula shows that the com-
pensation magnet must be located asymmetrically in respect to
the magnetic sensitive element.

During experimental tests, the zero-drift was reduced by more
than 20 times in comparison with the conventional location of
the compensation magnet on the axis of the sensitive element.

The article contains 4 graphs.
One Russian reference is cited.

INSTITUTION: Institute of Machine Study and Automation of the Ukrainian Aca-
demy of Sciences.

PRESENTED BY:Savin, H.M., (Russian equivalent - Savin G.N.) Member of the
Ukrainian Academy of Sciences.

SUBMITTED: 6 December 1956

AVAILABLE: At the Library of Congress
Card 2/2

AUTHOR: Berkman, R. Ya. (L'vov)   103-19-4-9/12

TITLE: Phase Detector for Divisible Frequencies (Fazovyy detektor
                na kratnyye chastoty)

PERIODICAL: Avtomatika i Telemekhanika, 1958, Vol. 19, Nr 4, pp. 360-365
                (USSR)

ABSTRACT: Here a new scheme of a phase detector with divisible frequen-
                cies was worked out. The scheme belongs to the detector type
                with non-linear symmetrical resistances. It is based upon the
                application of a non-linear circuit element with symmetrical
                voltampere characteristic which is a Graetz(Grets)-bridge of
                4 rectifiers (which are connected to the joint blocking vol-
                tage). In such a circuit the non-linear element has a high
                symmetry, as the deblocking of the circuit takes place at one
                and the same value $u > U_0$ independently of the direction of
                the voltage. The influence of the other sources of the un-
                symmetry – of the change of linear rectifier resistances – can
                be diminished by means of additional connection of resistances.
                The phase detector, which is shown here, can easily be comput-
                ed for the quantities of the output resistance, the sensitivity,
                and the linearity, varying in a wide range. The computation
Card 1/3   is performed after the measured voltage in the presence of a

Phase Detector for Divisible Frequencies 103-19-4-$9/12$

limited rectifier assortment on account of the modification
of the blocking voltage and of additional resistances. Essen-
tial in this case is that at an introduction of additional
resistances the power in the circuit of the rectified voltage
can exceed the power, which is strayed through the rectifier,
by many times. In a diagram the operation of the here suggest-
ed scheme is explained. The scheme works as an interruptor
with doubled frequency, whereby the "blocking"-time is regul-
ated by the magnitude of the blocking voltage U_o (in case of
given u_k). For the analysis a linear fractional approximation
of the voltampere characteristic of the rectifier is assumed.
The action of the detector is examined on occasion of stabiliz-
ed operation. It is shown that in case of application of the
here suggested detector in non- equalized schemes the degree
of nonlinearity of the voltampere characteristic of the de-
tector is very important. In the general case it is difficult
to determine this degree by analytic means. In the realisat-
ion of the scheme in practice it is convenient to replace the
source of the blocking voltage E_o by a resistance, which is
shunted with a sufficiently high capacity. It is shown that,
with regard to the sensitivity threshold, the here given detec-
Card 2/3   tor does not differ from the usual schemes with semiconductor-

Phase Detector for Divisible Frequencies   1o3-19-4-9/12

rectifiers. Its application is preferable in those cases, where
the reading of the minimum sensitivity threshold is not essen-
tial. Rectification with the here examined detector takes pla-
ce also then, when the frequency of the commutating voltage
surmounts the measured one. In difference from detectors of
other schemes here the value of the rectified current is in-
versely proportional to the commutation voltage.   There are
7 figures and 2 references,   which are Soviet.

SUBMITTED: December 1, 1956

AVAILABLE: Library of Congress

                1. Phase detectors--Design   2. Phase detectors--Applications

Card 3/3

AUTHORS: Berkman, R. Ya., Mikhaylovskiy, V. N.

TITLE: The Tension Measurements of a Weak Alternating Magnetic Field of Low Frequency in Geophysical Prospecting.

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 6, pp 865-871 (USSR)

ABSTRACT: The improved method of measuring the magnetic field by means of an induction coil is described, the e.m.f. of which is defined by Eq (1). Its maximum sensitivity for a load R_H (Fig 1) is calculated from Eqs (2) and (3). The method of measurements is based on the principle of magnetic modulation obtained from an auxiliary field produced by a ferromagnetic element (sond). The characteristic of a magnetomodulating gauge, MMD , is defined by the function (4), where S_k - sensitivity of MMD on the k-th harmonic, $H(t)$ - tension of the outer field, n^0 - unit vector in the direction of the MMD axis, ω_0 - frequency of the generated current in MMD . A typical example of the second harmonic MMD arrangement is illustrated in Figs 2 and 3, where a generator 1 supplies the current of frequency ω_0 to the MMD 2 and the phase detector 4 . The function

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SOV/49-59-6-8/21

The Tension Measurements of a Weak Alternating Magnetic Field of
Low Frequency in Geophysical Prospecting

of the second harmonic $2\omega_0$ at the output (Eq 6) of the
MMD ($U_\text{Д}$, Fig 3b) is proportional to the component H
(Eq 5) of the outer field (Fig 3, a, thick line). In order
to measure H_m and φ_H , the amplifier 3 separates the
signal components $2\omega_0 + \omega$ and $2\omega_0 - \omega$, i.e. its filter-
ing band should be equal to 2ω . The resultant sensitivity
of the device can be determined from the formula (7) where
H - effective tension, S_2 - sensitivity of MMD , k_3
and k_6 - amplification coefficients of the amplifiers 3
and 6 respectively, k_5 - transition coefficient of the
filter 5 , k_4 and k_8 - rectification coefficients of
detectors 4 and 8 respectively, $U_\text{пр}$ - output tension
of detector 8 . The maximum sensitivity of the MMD with

Card 2/3

SOV/49-59-6-8/21

The Tension Measurements of a Weak Alternating Magnetic Field of
Low Frequency in Geophysical Prospecting

a load, illustrated in Fig 4, can be determined from Eq (8).
The gain of sensitivity obtained by this method can be deter-
mined from Eq (10). This, in practice, amounts to 100 to
10 000 times higher than the sensitivity of an ordinary in-
ductive method. This was confirmed by experiments with a
scale model corresponding to the layout (Fig 2) and the MHD,
Fig 5. The results of measurements are shown in Fig 6 and
the table on p 870. There are 6 figures, 1 table and 10
references, of which 9 are Soviet and 1 English.

ASSOCIATION: Institut mashinovedeniya i avtomatiki AN USSR (Institute
of Machines Management and Automation, Academy of Sciences,
Ukrainian SSR)

SUBMITTED: June 4, 1958.

Card 3/3

BERKMAN, R. Ya., Cand Tech Sci -- (diss) "Measurement of the field strength of variable magnetic fields at low frequency by method of double transformation of signal." L'vov, 1960. 21 pp with illustrations; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, L'vov Polytechnic Inst); 150 copies; price not given; list of author's work at end of text (12 entries); (KL, 27-60, 152)

9.6130

21372
S/194/61/000/009/003/053
D209/D302

AUTHOR: Berkman, R.Ya.

TITLE: On a new version of a magneto-modulating transmitter
                 for measuring magnetic field intensity gradients

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
                 no. 9, 1961, 7, abstract 9 A42 (V sb. Avtomat. kon-
                 trol i izmerit. tekhn., no. 4, Kiyev, AN USSR, 1960,
                 157-162)

TEXT: A differential magneto-modulating transmitter (MT)
for measuring magnetic field gradient is described. In contrast to
the models presently in use, MT employs one core of a soft magnetic
material. An exciting coil is uniformly wound on it. Two measuring
coils connected in opposition are fixed on narrow bobbins and sym-
metrically positioned along the core. The output signal of MT is
proportional to the difference in intensity of the external field
at the points where the measuring coils are located. MT can be

Card 1/2

21372
S/194/61/000/009/003/053
D209/D302

On a new version...

used with the same circuits as the units presently in use, and it has a series of advantages over the latter: higher sensitivity, low noise level, simplicity of construction. 1 reference. /Abstracter's note: Complete translation/

Card 2/2

S/552/60/000/027/008/008
H000/H000

AUTHORS: Berkman, R. Ya., and V. N. Mikhaylovskiy

TITLE: Measuring the intensity of alternating low-frequency magnetic
           fields by double signal conversion.

SOURCE: Prikladnaya geofizika (sbornik statey), no. 27, 1960, 212-222

TEXT: The method of double conversion of signals for measuring intensity
of alternating low-frequency magnetic fields is schematically described and
its advantages over ordinary self-induction methods are outlined. The
method utilizes the investigated field itself to magnetically modulate an
auxiliary high-frequency field excited in a ferromagnetic element (sonde).
This is accomplished by a magnetically modulated pickup (MMP), whose
output voltage, proportional to the external field's intensity along the pickup
axis, is itself one of the harmonics of the excitation current. This signal

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Measuring the intensity (Cont.)   S/552/60/000/027/008/008
                                                H000/H000

is modulated by the frequency   to be measured, while high-frequency signal
detection determines the amplitude phase of the modulated oscillation's
envelope. A double conversion of the frequency being measured thus takes
place in the measuring channel, whence the name of the method. A standard
schematic diagram of the MMP for the second harmonic, for measuring mag-
netic field intensity (module and phase) when the exciter is close by, is in-
cluded. The chief advantage of the MMP over conventional induction-type
devices is its higher sensitivity, proportional to the square root of the ratio
between the MMP's excitation frequency and the frequency being measured.
Since the excitation frequency of an MMP made of ferrites may attain several
megacycles, the double signal conversion method may be from 100 to 10,000
times as sensitive as the induction method. Other advantages of the proposed
method are: 1) it is noise resistant; and 2) total amplification is divided be-
tween high- and low-frequency, eliminating interchannel interference. The
method can be used whenever the intensity vector, or derivatives of its com-
ponents with respect to given directions (gradients) are to be measured for a
low-frequency magnetic field. The proposed method, wnicn would permit

Card 2/3

Measuring the intensity (Cont.)   S/552/60/000/027/008/008
                                                     H000/H000

complete automation of measuring operations, and possibly make telemetering
feasible, has been experimentally tested in a model device for measuring mag-
netic susceptibility and electrical conductivity of specimens. The design and
electric parameters of the model are given, and results of tests of threshold
intensity and of the system's sensitivity and zero-point stability are summarized.
There are 5 figures and 1 table. There is one English-language reference, which
reads as follows: Guelke, R. A., "Geophysical Prospecting Instruments Using
Alternating Current of Audio Frequency", I. St. Instr., v. 22, no. 8, 1945.

Card 3/3

BERKMAN, R.Ya.

Means of constructing measuring networks using magnetic amplifiers
and magnetomodulating transducers. Geofiz. prib. no.10:50-53
'61.   (MIRA 15:8)
                              (Magnetic instruments)

S/103/62/023/010/006/008
D201/D308

9,3530

AUTHORS: Berkman, R. Ya. and Sinitskiy, L. A. (L'vov)

TITLE: Maximum possible gain of a magnetic modulator with doubled frequency at the output and means of its realization

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 10, 1962, 1385-1392

TEXT: The analysis is carried out in the following order: 1. Determination of basic factors limiting the sensitivity of the modulator, assuming that there is no hysteresis, that the excitation source has unlimited power, the excitation current has no even harmonics and one extremum only between two zero values, that μ is an even single-valued function and has a single extremum at $H = 0$ and that the intensity of the signal field H_o is small compared with that of the core saturation. 2. The determination of the shape of the excitation current curve for maximum sensitivity found under

Card 1/3

Maximum possible gain S/103/62/023/010/005/008
                                          D201/D308

the above conditions, without load and with a resistive load for
any of the even harmonics and for the average value of output vol-
tage. 3. The results are applied to the curve of magnetic polarity
reversal with hysteresis and some factors are considered which
lower the sensitivity of a real modulator. It is shown that the
maximum gain is the same for all even harmonics, is independent
of the shape of the core and the shape of the magnetic polarity re-
versal curve, and is determined only by the value of μ_{max}. Addi-
tional conditions are determined for optimum operation under load
and with hysteresis. Optimum operating conditions under load are
only possible when the output current is rectangular and its width
depends on the permanent field intensity. A formula is indicated
for the pulse width. The results obtained are therefore valid
provided the polarity reversal period and the time constant of the
output winding is much shorter than the pulse duration. Since
these conditions are not satisfied in practice, the actual power
gain is smaller. It is stated in conclusion that the results ob-
tained can be applied to all types of excitation, including the
pulsed excitation and could, therefore, help in the development
Card 2/3

Maximum possible gain ...   S/103/62/023/010/006/008
                                     D201/D308

of a unified theory of all types of magnetic amplifiers. There are
4 figures.

SUBMITTED: December 7, 1961

Card 3/3

BERKMAN, R.Ya.; RAKOV, M.A.

Transformation of phase shifts during frequency conversions.
Radiotekhnika 18 no.1:78-79 Ja '63.   (MIRA 16:2)
          (Electric networks)   (Electronics)

S/169/63/000/002/001/127
D263/D307

AUTHOR: Berkman, R. Ya.

TITLE: A method of construction of measuring circuits based
             on magnetic amplifiers and magnetically modulated
             probes

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 11-12,
             abstract 2A60 (Geofiz. proborostr. no. 10, L., Gos-
             toptekhizdat, 1961, 50-53)

TEXT: A method is described for the construction of measuring
circuits with magnetic converters operating under the conditions
of d.c. current (field) measurement. When the converter is excited
with a high-frequency signal, the suggested method may be used
to produce a low-frequency signal at the output of the circuit,
which is proportional to the measured quatity. Auxiliary magneti-
zation of the converter at a low frequency is used to produce
the low frequency output signal. The circuit is accurate and re-
liable and may be recommended for peak-type converters. /Abstrac-
ter's note: Complete translation./
Card 1/1